

ment is correct it easily accounts for the widespread distribution of the species in this vicinity.—LUMAN ANDREWS, Southington, Connecticut.

---

BIOLOGICAL RELATION OF POLYGONUM HARTWRIGHTII TO P. AMPHIBIUM. — *Polygonum Hartwrightii*, Gray, and *P. amphibium*, L., ordinarily seem quite distinct. *P. amphibium* is generally found in water and has thick shining leaves on long petioles, mostly clustered at the end of the long floating stems. *P. Hartwrightii* is usually found on muddy borders of ponds or along ditches in wet meadows, has longer and narrower leaves that are nearly sessile and more or less hairy, the stems are erect, very leafy, and the sheaths have a peculiar foliaceous spreading border. It is to be noted however that Dr. Gray in describing *P. Hartwrightii*, states that it is very closely related to *P. amphibium*, the flowers and fruit being the same, the only difference being in the habit and foliage. *P. Hartwrightii* is notoriously sterile, it being a rare thing to find it in fruit in this region.

Attention was called to these plants in consequence of the finding of what appeared to be *P. Hartwrightii* where before only *P. amphibium* had been seen. The writer had supposed the two forms to be distinct and every endeavor was made to prove that to be the case, but without avail. *Polygonum amphibium* is common in Shuttle Meadow Lake, in Southington. This lake furnishes the water supply for the city of New Britain, and most of these observations were made at this station, though the same facts were noted at another place.

During the long dry summer of 1900, the water in the lake was drawn down to much below its ordinary level, and its sloping banks gave an unusual opportunity to study the plants under varying conditions. The facts as found after several visits and much tracing out of stems and root systems were as follows:

As the water receded the floating stems of *P. amphibium* were left stranded on the banks. They would retain life for a time, often taking root at the tip and sometimes at the joints, but generally would at last die and wither away from exposure to the dry air. Then from the same root or from the lower joints of the old stems would spring new erect stems having the foliage of *P. Hartwrightii*. Different forms of leaf would occur showing all variations of intergrading forms.



In some cases it was possible to secure specimens that still retained some of the old formerly floating leaves at the tip of the long stems, yet had erect stems from the same root, bearing the hairy leaves and foliaceous sheaths of *P. Hartwrightii*.

In early October when the water was at its lowest point, the plants farthest up the bank had lost nearly all trace of the *amphibium* form, while lower down all stages of transformation could be seen between that and the plants still floating in the water, true *amphibium*.

The fact that in this case the same root that produced typical *P. amphibium* when under water, produced typical *P. Hartwrightii* when left exposed for a time above water, would seem to prove that *P. Hartwrightii* is not a distinct species but a terrestrial form of *P. amphibium*. It is nothing unusual that this should be the case, as many other species are known to take different forms under such conditions. *Ranunculus multifidus* and its var. *terrestris*, and *Myriophyllum ambiguum* and its var. *limosum*, are illustrations of such variations.

From the scarcity of flowers and fruit in the terrestrial plants of this *Polygonum*, it would be inferred that the species was in its normal habitat when growing in water. Although *P. Hartwrightii* in the locality where I have observed the transitions above described, is obviously only a biological state of *P. amphibium*, this state appears to become in other places the habitual form, so that it requires some taxonomic recognition. It cannot be regarded as a distinct species, and it may be best to call it *P. amphibium*, var. **Hartwrightii** as it appears closely analogous to the varieties of *Ranunculus* and *Myriophyllum*, mentioned above. — C. H. BISSELL, Southington, Connecticut.

---

SALERATUS AS A PROTECTION AGAINST RHUS-POISONING.—In the matter of Ivy-poisoning, discussed by Franz Pfaff, M. D., in the March RHODORA, I have had a little experience which may be of interest to those readers who have been kept from exploring rich floral fields through fear of *Rhus venenata*, the poison Dogwood. Not far from my home, on the boundary between Southbridge and Charlton, Massachusetts, there is a large sphagnous tract, known as Cedar Swamp. A good-sized pond lies concealed in it, and where the road crosses the swamp one can from the roadside run a pole down many feet without reaching bottom; yet the tangle of roots is so thick that by exercising a little care it is possible to walk upon